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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,872	10/17/2000	Lily Barkovic Mummert	YOR920000462-US1	2932

7590 09/08/2004

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EXAMINER

VO, LILIAN

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/690,872	Applicant(s) MUMMERT ET AL.	
	Examiner Lillian Vo	Art Unit 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5 - 11, 14, 15 and 17 - 20 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 12, 13 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1 – 20 are pending.

Claim Objections

2. **Claim 16** is objected to because it has an improper dependency. For the purpose of the examination, the examiner will assume it's depending on claim 15 instead of claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5, 11 and 14 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartsell et al. (US Pat. Application Publication US 2003/0236745 A1, hereinafter Hartsell) in view of Chafe (US Pat. Application Publication US 2001/0054097 A1).

5. Regarding **claim 1**, Hartsell teaches a method for projecting usage of computer resources for a plurality of processing systems in a processing environment (page 1, paragraph 0009) comprising the step of:

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representing a plurality of capacities, one capacity for each system of said plurality of processing systems in units of time (Fig. 2: subsystems resources 210, 215, and 275. Page 13, paragraph 0104: capacity may be measured in terms of the number of files that may be partially cached, the number of TCP/IP connections per second. Page 20, paragraph 0166: features of deterministic information management such as system or subsystem resources of available storage access, available application memory, available processor capacity and available network bandwidth parameters may be employed to enhance capacity planning and to manage growth more easily. Pages 37 – 38, paragraph 0288: monitoring system or subsystem individual resource consumption).

Hartsell however did not teach the step of sorting the capacities of the plurality of processing systems. Chafe teaches a system that has a capability to provide graphical representations of estimated resource utilization calculations to have multiple views of the system data with sorted by capacity (abstract, page 2, paragraph 0038: include a view sorted by mean holding time. Page 3, paragraph 0061).

It would have been obvious for one of an ordinary skill in the art to recognize the sorting feature of Chafe's system could sort the data by either ascending or descending order, in this case from shortest to longest time. It would also have been obvious for one of an ordinary skill in the art, at the time the invention was made, to combine the teachings of Hartsell and Chafe to have the capability to have multiple views of the data with the sorting feature to suit the needs of different types of users (Chafe: page 2, paragraph 0038).

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6. Regarding **claim 3**, Hartsell teaches the step of altering the workload on at least two of said plurality of processing systems to improve resource utilization (page 22, paragraphs 0184 – 0188, fig. 5, 150, 155).

7. Regarding **claim 5**, Hartsell teaches the method of claim 3, further comprising reevaluating the usage of computer resources for the at least two of said plurality of processing systems (page 20, paragraphs 0170, 0172, page 22, paragraphs 0184 – 0188, fig. 5).

8. **Claims 11 and 14 – 15** are rejected on the same ground as stated in claims 1, 3 and 5 above.

9. Claims 6 – 10 and 17 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartsell et al. (US Pat. Application Publication US 2003/0236745 A1, hereinafter Hartsell) in view of Chafe (US Pat. Application Publication US 2001/0054097 A1) as applied to claims 1, 11 and 15 above, and further in view of MacForlane et al (US 6,516,348 B1, hereinafter MacForlane).

10. Regarding **claim 6**, Hartsell and Chafe combined did not teach the additional limitation as claimed. Nevertheless, MacForlane teaches the step of calculating and predicting capacity limits of system resources in graphical presentation of a time-to-saturation in which the X axis represents utilization, and the Y axis represents time passed (col. 9, lines 14 – 34: all values to the right of this line are calculated or projected values based on historical data. Col. 12, lines 6 – 15, 51 – col. 13, lines 4 and fig. 9).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate MacForlane's teaching to the combined teachings of Hartsell and Chafe to obtain from the graphical presentation the possible constraints on resources usage.

11. Regarding **claim 7**, Hartsell and Chafe combined did not teach the additional limitation as claimed. Nevertheless, MacForlane teaches the step of identifying at least one critical resource for each processing system based on its location within the N dimensional capacity space (col. 12, lines 51 – col. 13, lines 4 and fig. 21: critical period displays a projection of when capacity will be exceeded for compound resources).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate MacForlane's teaching to the combined teachings of Hartsell and Chafe to obtain from the graphical presentation the possible constraints on resources usage.

12. Regarding **claim 8**, Hartsell and Chafe combined did not teach the additional limitation as claimed. Nevertheless, MacForlane teaches the step of identifying at least one available resource in said plurality of processing systems based on its location within the N dimensional capacity space (col. 6, lines 11 – 33, and 53 - 65).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate MacForlane's teaching to the combined teachings of Hartsell and Chafe to obtain from the graphical presentation the possible constraints on resources usage.

13. **Claims 9 – 10 are 17 - 20** are rejected on the same ground as stated in claims 6 – 8 above.

Allowable Subject Matter

14. **Claims 2, 4, 12, 13 and 16** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

15. Applicant's arguments filed 5/26/04 have been fully considered but they are not persuasive for the reasons set forth below.

16. With respect to applicants' remark that none of Hartsell's teachings are applied to representing the capacity of more than one processing systems and none of capacity passages teach capacity in units of time (page 12, 1st paragraph), the examiner disagrees. Regarding the limitation representing the capacity of more than one processing system, this can be seen in fig. 2, where a plurality of subsystems resource such as networking 205 and application processing 225 are being monitoring and page 20, paragraph 166 discloses the features of deterministic information management such as system or subsystem resources of available storage access, available application memory, available processor capacity and available network bandwidth parameters may be employed to enhance capacity planning and to manage growth more easily. This passage illustrates the capacity of more than one subsystem, hence read on the claim limitation for capacity of more than one processing system. Regarding the limitation capacity in units of time, this can be found on page 13, paragraph 0104 in which capacity may be measured in term of the number of TCP/IP connections per second. Hence, network connections per

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second illustrate the capacity in units of time. Moreover, the passage from paragraph 288 was used for the point the capacity of the system such as monitor the system or subsystem individual resource consumption.

17. Regarding applicants' remark that Chefe does not teach or suggest representing capacity in unit of time, the examiner disagrees. Chefe discloses in paragraph 38 that the invention is capable of providing multiple views of the data including a view sorted by capacity and a view sorted by mean of holding time. In other words, Chefe discloses the features of sorting the capacity and the sorting by mean of holding time, which read on the claim limitation. Regarding paragraph 137 and fig. 18, neither one was cited in the office action.

18. Regarding applicants' remark that MacFarlane does not teach or suggest the claim 6 feature because fig. 9 describes and illustrates performance over a period of months (page 14, 2nd paragraph, lines 5 – 8), the examiner disagrees. MacForlane teaches the step of calculating and predicting capacity limits of system resources in graphical presentation with fig. 9 illustrates how a time-to-saturation period in which the X axis represents utilization, and the Y axis represents time passed. All plotted data values 9.20 to the left of this line are historical and recorded values. All values to the right of this line are calculated or projected values based on historical data (col. 9, lines 14 – 34, col. 12, lines 6 – 15, 51 – col. 13, lines 4 and fig. 9). Thus, MacForlane teaches the limitation of plotting the life expectancy for each resource in the in the processing system in a dimensional capacity space.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

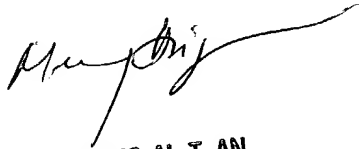
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Lilian Vo
Examiner
Art Unit 2127

lv
August 31, 2004



MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100